

News Report

NATIONAL ACADEMY OF SCIENCES
INSTITUTE OF MEDICINE

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INSTITUTE OF MEDICINE

NATIONAL RESEARCH COUNCIL

1975 News Report Index

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News Report records the major activities of the National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and National Research Council. Six issues were published in 1975.

This index is intended insofar as possible to provide a digest of the contents of the 1975 issues of *News Report*. Because the publication is devoted in large measure to discussion of reports issued by committees and panels of these organizations, principal entries generally are listed by title of report discussed (not by title of *News Report* article), alphabetically. Names of persons,

organizations, and agencies also are listed alphabetically. Subject headings and cross-references are included for topics of particularly wide interest (e.g., agriculture, energy, environment). The *News Report Index* is compiled by Gay Mackintosh.

The 1976 index will be issued early next year. Copies of the 1973 and 1974 indexes are available from the *News Report* office, National Academy of Sciences, 2101 Constitution Avenue N.W., Washington, D.C. 20418. Back volumes of *News Report* in microform can be ordered from Xerox University Microfilms, 300 North Zeeb Road, Ann Arbor, Mi. 48106.

Abdellah, Faye G., of U.S. Public Health Service, elected to NAS Institute of Medicine—Autumn, 5

Ackerman, William, ended term on NAE Council—Apr, 1

Adler, Stephen L., of Institute for Advanced Study, elected to National Academy of Sciences—Apr, 2

Agricultural Production Efficiency, NRC Board on Agriculture and Renewable Resources' Committee on Agricultural Production Efficiency, report offers mixed appraisal of U.S. agricultural prospects following study of the economics of agriculture and its scientific and technological base—while output has grown, some production efficiency trends show diminishing rates of increase, and available measures of inputs and outputs for U.S. agriculture are inadequate for assessing changes in production efficiency. Report points up uncertainty about the future, and the challenge of this mixed appraisal for public policy; "promising basic research areas" for greater productivity include cell fusion, photosynthesis, and biological nitrogen transformations, and special research emphasis is urged for legumes and livestock reproduction—Jan, 1, 6-7

agriculture: *see Agricultural Production Efficiency; Arid Lands of Sub-Saharan Africa; Products from Jojoba: A Promising New Crop for Arid Lands; The Winged Bean: A High-Protein Crop for the Tropics; see also food resources*

Air Quality and Power Plant Emissions, NRC Review Committee on: *see Air Quality and Stationary Source Emission Control*

Air Quality and Stationary Source Emission Control, NRC Commission on Natural Resources, report follows U.S. Senate Committee on Public Works request for analysis of scientific and technical issues in assessment and control of sulfur-oxides and nitrogen-oxides air pollution from

stationary sources, chiefly power plants. Studies in epidemiology, atmospheric chemistry and physics, fuel economics, and boiler engineering were examined; report involves contributions from the commission, NRC Assembly of Life Sciences, and NRC Assembly of Engineering's Committee on Public Engineering Policy and Review Committee on Air Quality and Power Plant Emissions—Mar, 1, 4; principal findings and recommendations reprinted from report—Mar, 4-8

Alberts, Bruce M., of Princeton University, received *U.S. Steel Foundation Award in Molecular Biology* at NAS annual meeting—Apr, 3

Aldrich, Daniel G., Jr., of University of California at Irvine, chaired NRC Committee on World Food, Health and Population reporting on *Population and Food: Crucial Issues*—Autumn, 4

Ancker-Johnson, Betsy, Assistant Secretary of Commerce for Science and Technology, elected to National Academy of Engineering—Apr, 6

Anderson, Arthur G., of IBM Corp., elected to National Academy of Engineering—Apr, 6

Andrews, Henry N., of University of Connecticut, elected to National Academy of Sciences—Apr, 2

Arid Lands of Sub-Saharan Africa, Advisory Panel on Arid Lands of Sub-Saharan Africa, NRC Board on Science and Technology for International Development, report concludes severe drought cycles in the region will continue and must be considered in long-term development plans. Panel collaborated with Rockefeller Foundation in 1974 international meeting, leading to recommendation to establish an institute in the Sahel to improve food production and management of the six Sahelian nations by broadening the region's economic base—Autumn, 5

Aris, Rutherford, of University of Minnesota, elected to National Academy of Engineering—Apr, 6

Arms Control and Disarmament Agency, U.S.: *see Long-Term Worldwide Effects of Multiple Nuclear-Weapons Detonations Assessing Potential Ocean Pollutants*, Study

Panel on Assessing Potential Ocean Pollutants, NRC Ocean Affairs Board, report explores ways to anticipate need for control of potentially significant marine pollutants released by human activity, and calls for systematic review of possible ocean contaminants for key characteristics: rate of release, lifetimes in the environment, tendencies to concentrate, and toxicity. Transuranic elements and chlorinated hydrocarbons are two materials presenting "clear potential problems" for human health and the integrity of ecosystems; but panel found lack of data on production, use, and environmental release of such materials a very serious obstacle to assessment of potential impact—Jan, 2

An Assessment of the Impact of World Data Centers on Geophysics, Committee on Data Interchange and Data Centers, NRC Geophysics Research Board, report on World Data Centers—established through the International Council of Scientific Unions for deposit and international exchange of geophysics findings—finds the network has a large, scientifically productive clientele and makes possible improved quality of research: "WDC data exchange arrangements are a strong and necessary component of national and international efforts in geophysics"—May, 2

Astin, Allen V., Home Secretary of National Academy of Sciences, announced re-election of NAS President Handler—Feb, 1; D. R. Goddard elected to succeed Astin as home secretary—Apr, 1

Astronomy Manpower Committee, NAS Committee on Science and Public Policy:

see *Employment Problems in Astronomy*
 Atkin, Rupert L., of TRW, Inc., elected to National Academy of Engineering—Apr, 6
 atmosphere: see *Air Quality and Stationary Source Emission Control*; *Atmospheric Chemistry*, NRC Panel on; *Environmental Impact of Stratospheric Flight: Biological and Climatic Effects of Aircraft Emissions in the Stratosphere*; *Long-Term Worldwide Effects of Multiple Nuclear-Weapons Detonations*; *Medical and Biologic Effects of Environmental Pollutants*, NRC Committee on; *Nickel (Medical and Biologic Effects of Environmental Pollutants)*

Atmospheric Chemistry, Panel on, NRC Climatic Impact Committee: began assessment of possible effects of halocarbons, Space Shuttle emissions, and other contaminants on the stratospheric ozone layer; study is supported by National Aeronautics and Space Administration, National Science Foundation, Environmental Protection Agency, and National Oceanic and Atmospheric Administration—Mar, 1 awards, National Academy of Engineering: *1975 Founders Medal* awarded to J. B. Fisk; *Vladimir K. Zworykin Award* to J. S. Kilby—Apr, 8 awards, National Academy of Sciences: *James Craig Watson Medal* awarded to G. M. Clemence; *John J. Carty Medal* to J. T. Wilson; *Henryk Arctowski Medal* to J. M. Beckers; *U.S. Steel Foundation Award in Molecular Biology* to B. M. Alberts; *Benjamin Aphor Gould Prize* to L. Wolter; *NAS Award in Environmental Quality* to J. T. Middleton; *Arthur L. Day Prize and Lectureship* to D. H. Matthews and F. J. Vine; *NAS Award for Distinguished Service* to S. Jablon—Apr, 3

Badger, Richard M., NAS member, died November 26, 1974—Jan, 3 Baker, W. O., of Bell Laboratories, Inc., elected to National Academy of Engineering—Apr, 6 Ballou, Clinton E., of University of California, Berkeley, elected to National Academy of Sciences—Apr, 2 Beard, Leo R., of University of Texas, Austin, elected to National Academy of Engineering—Apr, 6 Bechtel, Stephen D., Jr., of Bechtel Corp., elected to National Academy of Engineering—Apr, 6 Becker, Gary S., of University of Chicago, elected to National Academy of Sciences—Apr, 2 Beckers, Jacques M., of Sacramento Peak

Observatory, was awarded *Henryk Arctowski Medal* at NAS annual meeting—Apr, 3 Beermann, Wolfgang, of Max Planck Institute for Biochemistry, Germany, elected NAS foreign associate—Apr, 3 Benditt, Earl P., of University of Washington School of Medicine, elected to National Academy of Sciences—Apr, 2 Berry, Brian Joe L., of University of Chicago, elected to National Academy of Sciences—Apr, 2 Binger, Wilson V., of Tippets-Abbett-McCarthy-Straton, elected to National Academy of Engineering—Apr, 6 *Biological Oceanography: Some Critical Issues, Problems, and Recommendations*, NRC Ocean Affairs Board's Ocean Science Committee, panel report on research needs of biological oceanography bears on world food supply problem in its finding that reliable estimates of food-producing potential of the sea require better quantitative information and evaluation—Autumn, 5 Bjerknes, Jacob, NAS member, died July 7, 1975—Autumn, 3 Bloch, Herman S., of Universal Oil Products Co., elected to National Academy of Sciences—Apr, 2 Bloembergen, Nicolaas, of Harvard University, elected to three-year term on NAS Council—Apr, 1 Blumberg, Baruch S., of Institute for Cancer Research and University of Pennsylvania School of Medicine, elected to National Academy of Sciences—Apr, 2 Böbeck, Andrew H., of Bell Laboratories, Inc., elected to National Academy of Engineering—Apr, 6 Boffey, Philip, quoted from his book *The Brain Bank of America: An Inquiry into the Politics of Science*—May, 2 Bogdanoff, John L., of Purdue University, elected to National Academy of Engineering—Apr, 6 Boley, Bruno A., of Northwestern University, elected to National Academy of Engineering—Apr, 6 Booker, Henry G., of University of California at San Diego, chaired NRC Climatic Impact Committee reporting on *Environmental Impact of Stratospheric Flight: Biological and Climatic Effects of Aircraft Emissions in the Stratosphere*; quoted—Mar, 1, 2 Boudart, Michel, of Stanford University, elected to National Academy of Sciences—Apr, 2 Boulding, Kenneth E., of University of Colorado, elected to National Academy of Sciences—Apr, 2 Bovey, Frank A., of Bell Laboratories Polymer Chemistry Research Department, elected to

National Academy of Sciences—Apr, 2 Brady, Roscoe O., Jr., of National Institute of Neurological Diseases and Stroke, elected to National Academy of Sciences—Apr, 2 *The Brain Bank of America: An Inquiry into the Politics of Science* (McGraw-Hill, 1975), by Philip Boffey, critique of National Academy of Sciences for the Center for Study of Responsive Law—May, 2 Branscomb, Lewis M., of IBM Corp., to end term on NAS Council—Apr, 1; elected to NAS Institute of Medicine—Autumn, 5 Branson, Herman R., of Lincoln University, Pa., elected to NAS Institute of Medicine—Autumn, 5 Breslow, Lester, of University of California School of Public Health, Los Angeles, elected to NAS Institute of Medicine—Autumn, 5 Brian, P. L. Thibaut, of Air Products and Chemicals, Inc., elected to National Academy of Engineering—Apr, 6 Bricker, Neal S., of Albert Einstein College of Medicine, elected to NAS Institute of Medicine—Autumn, 5 Brobeck, John R., of University of Pennsylvania School of Medicine, elected to National Academy of Sciences—Apr, 2 Bronk, Detlev W., of Rockefeller University, scheduled to speak at special symposium in recognition of National Science Foundation's 25th anniversary at NAS annual meeting April 21, 1975—Feb, 2 Brooks, Chandler M., of State University of New York Downstate Medical Center, elected to National Academy of Sciences—Apr, 2 Brown, Alfred E., of Celanese Research Co., elected to National Academy of Engineering—Apr, 6 Brown, J. H. U., of Southwest Research Consortium, elected to National Academy of Engineering—Apr, 6 Burnett, James R., of TRW Systems Group, elected to National Academy of Engineering—Apr, 6 Burns, John J., of Hoffmann-La Roche, Inc., elected to National Academy of Sciences—Apr, 2 Burton, Glenn W., of Georgia Coastal Plain Experiment Station and University of Georgia, elected to National Academy of Sciences—Apr, 2

Calabresi, Guido, of Yale University, quoted from NAS Institute of Medicine conference report *Ethics of Health Care*—Jan, 4-5 Calhoun, Noah R., of Veterans Administration Hospital, Washington, D.C., elected to NAS

Institute of Medicine—Autumn, 5
 Cameron, Eugene N., of University of Wisconsin, served on Subpanel on Fossil Fuel Resources, Panel on the Estimation of Mineral Reserves and Resources, NRC Committee on Mineral Resources and the Environment—Feb, 4
 Cannon, Robert H., Jr., of California Institute of Technology, to be succeeded by C. D. Perkins as chairman of NRC Assembly of Engineering; elected to three-year term on NAE Council—Apr, 1
 Carter, H. E., past chairman of National Science Board, co-chairman (with N. Hackerman) of special NAS symposium in recognition of National Science Foundation's 25th anniversary scheduled for NAS annual meeting April 21, 1975—Feb, 2
 Case, Kenneth M., of Rockefeller University, elected to National Academy of Sciences—Apr, 2
 Cassel, John C., of University of North Carolina School of Public Health, elected to NAS Institute of Medicine—Autumn, 5
 Chalmers, Bruce, of Harvard University, elected to National Academy of Sciences—Apr, 2
 Chapman, Dean R., of Ames Research Center, National Aeronautics and Space Administration, elected to National Academy of Engineering—Apr, 6
 Charpie, Robert A., of Cabot Corp., elected to National Academy of Engineering—Apr, 6
 Chase, Merrill W., of Rockefeller University, elected to National Academy of Sciences—Apr, 2
 Chenea, Paul, ended term on NAE Council—Apr, 1
 Clemence, Gerald M., posthumously honored with *James Craig Watson Medal* at NAS annual meeting—Apr, 3
 climate: *see Arid Lands of Sub-Saharan Africa; Atmospheric Chemistry, NRC Panel on; Environmental Impact of Stratospheric Flight: Biological and Climatic Effects of Aircraft Emissions in the Stratosphere; Long-Term Worldwide Effects of Multiple Nuclear-Weapons Detonations; Marine Scientific Research and the Third Law of the Sea Conference; see also agriculture; food resources*
 Climatic Impact Committee, NRC: *see Atmospheric Chemistry, Panel on; Environmental Impact of Stratospheric Flight: Biological and Climatic Effects of Aircraft Emissions in the Stratosphere*
 Cloud, Preston, to end term on NAS Council—Apr, 1
 Coffin, Louis F., Jr., of General Electric Co., elected to National Academy of Engineering—Apr, 6

Cohen, Edward, of Ammann & Whitney, Consulting Engineers, elected to National Academy of Engineering—Apr, 6
 Cohen, Melvin J., of Yale University, elected to National Academy of Sciences—Apr, 2
 Cohn, Zanvil A., of Rockefeller University, elected to National Academy of Sciences—Apr, 2
 Cole, Jonathan, of Columbia University, consultant to NAS Committee on Science and Public Policy studying government decision process behind the distribution of research funds—Autumn, 2
 Cole, Stephen, of State University of New York at Stony Brook, consultant to NAS Committee on Science and Public Policy studying government decision process behind the distribution of research funds—Autumn, 2
 Collman, James P., of Stanford University, elected to National Academy of Sciences—Apr, 2
Controls on Health Care, Institute of Medicine, National Academy of Sciences, papers of 1974 Conference on Regulation in the Health Industry examine the state and implications of governmental regulations of health-care costs; conference rapporteur Jonathan Spivak's observations on 'Imposing Better Methods of Cost Control on the Health Industry' conclude that fiscal ties between Federal programs (such as Medicare and Medicaid) and health-care institutions preclude a return to the free market and necessitate more effective regulation to moderate cost increases and make medical outlays more predictable for government and consumer. Conference experts disagreed on such cost control methods as health maintenance organizations, certification of need, state rate control, incentive reimbursement arrangements, economic stabilization controls, and Medicare and Medicaid controls; thus Spivak sees the most essential task to be devising ways that ideas of health care consumers can be entered into the debate and adopted—May, 6-7
 Coolidge, William D., NAS member, died February 3, 1975—Feb, 3
 Cooper, Leon N., of Brown University, elected to National Academy of Sciences—Apr, 2
 Cox, Gertrude Mary, of North Carolina State University, elected to National Academy of Sciences—Apr, 2
 Crawford, Bryce, Jr., of University of Minnesota, elected to three-year term on NAS Council—Apr, 1
 Creutz, Edward C., of National Science Foundation, elected to National Academy of Sciences—Apr, 2

Cromwell, Florence S., of University of Southern California's Occupational Therapy Department, Downey, elected to NAS Institute of Medicine—Autumn, 5
 Cronkhite, Leonard W., Jr., of Children's Hospital Medical Center, Boston, elected to NAS Institute of Medicine—Autumn, 5
 Cummings, Martin M., of National Library of Medicine, elected to NAS Institute of Medicine—Autumn, 5

Dahlstrom, Donald A., of Envirotech Corp., elected to National Academy of Engineering—Apr, 6
 Daily, James W., of University of Michigan, Ann Arbor, elected to National Academy of Engineering—Apr, 6
 Darlington, Sidney, of University of New Hampshire, elected to National Academy of Engineering—Apr, 6
 Data Interchange and Data Centers, Committee on, NRC Geophysics Research Board: *see An Assessment of the Impact of World Data Centers on Geophysics*
 Davenport, Wilbur B., Jr., of Massachusetts Institute of Technology, elected to National Academy of Engineering—Apr, 6
 Davis, Bernard D., of Harvard University School of Medicine, elected to NAS Institute of Medicine—Autumn, 5
 Davis, W. Kenneth, of Bechtel Power Corp., re-elected to three-year term on NAE Council—Apr, 1
 deaths (of NAE and NAS members and foreign associates): R. M. Badger; J. Bjerknes; W. D. Coolidge; M. Doudoroff; L. R. Dragstedt; J. R. Dunning; D. T. Griggs; H. Heffner; W. Hodge; P. L. Julian; W. K. Lewis; A. L. Loomis; R. Robinson; K. Schwartzwalder; M. Souders; M. C. W. Westergaard—*see entry under individual names for date of death and issue reported*
 Debus, Kurt H., of Cocoa Beach, Fla., elected to National Academy of Engineering—Apr, 6
 Demand for Fuel and Mineral Resources, Panel on, NRC Committee on Mineral Resources and the Environment: *see Mineral Resources and the Environment*
 Den Hartog, Jacob P., of Massachusetts Institute of Technology, elected to National Academy of Engineering—Apr, 6
 Dietrich, Joseph R., of Combustion Engineering, Inc., elected to National Academy of Engineering—Apr, 6
 Dillard, Joseph K., of Westinghouse Electric Corp., elected to National Academy of Engineering—Apr, 6
 Dinneen, Gerald P., of Massachusetts Institute

of Technology's Lincoln Laboratory, elected to National Academy of Engineering—Apr, 6
Doell, Richard R., of U.S. Geological Survey, chaired Panel on Demand for Fuel and Mineral Resources, NRC Committee on Mineral Resources and the Environment—Feb, 5

Doermann, August H., of University of Washington, elected to National Academy of Sciences—Apr, 2

Doudoroff, Michael, NAS member, died April 4, 1975—Apr, 4

Dragstedt, Lester R., NAS member, died

July 16, 1975—Autumn, 3

Dunlap, John C., consulting geologist, served on Subpanel on Fossil Fuel Resources, Panel on the Estimation of Mineral Reserves and Resources, NRC Committee on Mineral Resources and the Environment—Feb, 4

Dunning, John R., NAS member, died August 25, 1975—Autumn, 3

de Duve, Christian, of Catholic University of Louvain, Belgium, and Rockefeller University, New York, elected NAS foreign associate—Apr, 8

Eagle, Harry, to end term on NAS Council—Apr, 1
economic affairs: *see Agricultural Production Efficiency; Air Quality and Stationary Source Emission Control; Controls on Health Care; Evaluating Integrated Utility Systems; Graduate School Adjustments to the "New Depression" in Higher Education; Mineral Resources and the Environment; Products from Jojoba: A Promising New Crop for Arid Lands; Toward an Understanding of Metropolitan America*

Economic Opportunity, U.S. Office of: *see Protecting Individual Privacy in Evaluation Research*

education: *see Employment Problems in Astronomy; Graduate School Adjustments to the "New Depression" in Higher Education*

Eisdorfer, Carl, of University of Washington School of Medicine, elected to NAS Institute of Medicine—Autumn, 5

Eldred, Kenneth Mck., of Bolt Beranek and Newman Inc., elected to National Academy of Engineering—Apr, 6

elections, NAS Institute of Medicine: 41 individuals were elected to IOM membership for five-year terms, bringing total membership to 306—Autumn, 5 (*list of names*)

elections, National Academy of Engineering: C. D. Perkins was elected NAE president for remaining three years of term vacated by R. C. Seamans, Jr.; R. H. Cannon, Jr.,

and R. G. Folsom were elected to three-year terms on NAE Council (succeeding W. Ackerman and P. Chenea) and W. D. Lewis and W. K. Davis were re-elected—Apr, 1; 86 U.S. scientists were honored by election to NAE membership for important contributions or unusual accomplishments in engineering—Apr, 6-8 (*list of names and NAE citations*)

elections, National Academy of Sciences: P. Handler was re-elected NAS president for a six-year term—Feb, 1; at 1975 annual meeting, D. R. Goddard was elected NAS home secretary (succeeding A. V. Astin); named to NAS Council for three-year terms were N. Bloembergen, B. Crawford, Jr., I. C. Gunsalus, and F. Press (succeeding L. M. Branscomb, P. Cloud, H. Eagle, F. H. Westheimer)—Apr, 1; 84 U.S. scientists were elected to NAS membership, and 12 individuals were named NAS foreign associates—Apr, 2-3, 8 (*list of names*)

Elias, Peter, of Massachusetts Institute of Technology, elected to National Academy of Sciences—Apr, 2

Elliott, John F., of Massachusetts Institute of Technology, elected to National Academy of Engineering—Apr, 6

Emery, Kenneth O., of Woods Hole Oceanographic Institution, chaired Panel on the Estimation of Mineral Reserves and Resources, NRC Committee on Mineral Resources and the Environment; also chaired panel's Subpanel on Fossil Fuel Resources—Feb, 4

Employment Problems in Astronomy, Astronomy Manpower Committee, NAS Committee on Science and Public Policy, report examines training and employment trends, finds the field crowded, and emphasizes strengthening astronomy teaching to draw individuals out of doctoral programs and research. Recommended are notifying astronomy graduate students of limited research jobs; redirecting would-be researchers into education and industry; reducing astronomy-doctorate production without imposing arbitrary barriers; and adapting the conduct of astronomical research to provide research opportunities for those engaged primarily in teaching—Mar, 2

energy: *see Air Quality and Stationary Source Emission Control; Evaluating Integrated Utility Systems; Measurement of Energy Consumption: Data Needs and Methodologies, NRC Committee on; Mineral Resources and the Environment; Solar Energy Research Institute Committee, National Research Council; see also Toward an Understanding of Metropolitan America*
Energy Research and Development Administra-

tion, U.S.: *see Solar Energy Research Institute Committee*

Energy Studies, NRC Board on: *see Measurement of Energy Consumption: Data Needs and Methodologies, NRC Committee on environment: see Air Quality and Stationary Source Emission Control; Assessing Potential Ocean Pollutants; Atmospheric Chemistry, NRC Panel on; Environmental Impact of Stratospheric Flight: Biological and Climatic Effects of Aircraft Emissions in the Stratosphere; Evaluating Integrated Utility Systems; Long-Term Worldwide Effects of Multiple Nuclear-Weapons Detonations; Medical and Biologic Effects of Environmental Pollutants, NRC Committee on; Mineral Resources and the Environment; Nickel (Medical and Biologic Effects of Environmental Pollutants); Petroleum in the Marine Environment; Scientific and Technical Assessments of Environmental Pollutants, NRC Coordinating Committee on; Toward an Understanding of Metropolitan America*

Environmental Impact of Stratospheric Flight: Biological and Climatic Effects of Aircraft Emissions in the Stratosphere, NRC Climatic Impact Committee, report, at request of U.S. Department of Transportation, considers problems of stratospheric change—especially ozone reduction leading to increases of biologically harmful ultraviolet light at ground level—and expected consequences from effects of supersonic air transport (SST). Report concludes that increased stratospheric jetliner traffic will diminish earth's ozone shield, with expected increases in incidence of skin cancer and possible changes in surface temperature and rainfall. Committee recommended: alerting national and international regulatory authorities to potentially serious problems and need for constraints on aircraft emissions and fleet sizes; directing aircraft-engine research and development to reduce NO_x emissions and control sulfur content of fuels; increasing biological and medical studies of effects of changes in ultraviolet radiation and studies of skin cancer; increasing stratosphere studies by international scientific organizations and monitoring of stratospheric change; undertaking of research on stratospheric phenomena by U.S. National Aeronautics and Space Administration, and high priority for continuing its study of stratospheric effects of the Space Shuttle—Mar, 1, 2-3

Environmental Protection Agency, U.S.: *see Medical and Biologic Effects of Environmental Pollutants, NRC Committee on; Scientific and Technical Assessments of*

Environmental Pollutants, NRC Coordinating Committee on
Ernst, Wallace G., of University of California, Los Angeles, elected to National Academy of Sciences—Apr, 2

Estabrook, Ronald W., of University of Texas Graduate School of Biomedical Sciences, elected to NAS Institute of Medicine—Autumn, 5

Estimation of Mineral Reserves and Resources, Panel on, NRC Committee on Mineral Resources and the Environment: *see Mineral Resources and the Environment*

Ethics of Health Care, papers of the Conference on Health Care and Changing Values, organized by NAS Institute of Medicine's Committee on Human Value Issues in Health Care, examine kinds of value questions that are emerging for health policy and health care. Excerpts from report quote A. R. Jonsen, S.J., and A. E. Hellegers on problems of justice in design of medical institutions and policies; G. Calabresi on the social problems and costs of 'tragic choices'; D. Mechanic on medical care responsive to patients as persons; and P. H. Schuck on lack of consumer sovereignty in the health care field—Jan, 4-5

Evaluating Integrated Utility Systems, NAE Integrated Utility Systems Board (established to review program and prospects for Modular Integrated Utility Systems at request of U.S. Department of Housing and Urban Development), report deems MIUS promising and potentially valuable but urges further study since costs and technology are uncertain. Hoped-for benefits of integrated systems include conserving resources, reducing energy consumption, lessening environmental impact, easing housing shortages, improving land use and development, reducing costs—but both benefits and possible adverse effects require further study. Report recommends development of innovative technologies, with high priority for system concepts which integrate water treatment, liquid and solid waste processing, and total energy in a meaningful way; and additional studies of economic feasibility of different MIUS packages, cost-benefit comparisons, compliance with environmental standards, and extensive institutional problems—Feb, 2-3

Evans, Ersel A., of Westinghouse Hanford Co., elected to National Academy of Engineering—Apr, 6

F adum, Ralph E., of North Carolina State University, elected to National Academy of Engineering—Apr, 6

Engineering—Apr, 6

Farber, Saul J., of New York University Medical Center, elected to NAS Institute of Medicine—Autumn, 5

Federal Agency Evaluation Research, NRC Committee on: *see Protecting Individual Privacy in Evaluation Research*

Federal Energy Administration, U.S.: *see Measurement of Energy Consumption: Data Needs and Methodologies, NRC Committee on*

Federer, Herbert, of Brown University, elected to National Academy of Sciences—Apr, 2

Feenber, Eugene, of Washington University, elected to National Academy of Sciences—Apr, 2

Feher, George, of Revelle College, University of California, elected to National Academy of Sciences—Apr, 2

Fisk, James B., of Bell Laboratories, Inc., awarded *Annual Founders Medal* at NAE annual meeting—Apr, 8

Folsom, Richard G., of Napa, Calif., elected to three-year term on NAE Council—Apr, 1

Food and Nutrition Board, National Research Council: *see Nutrition and Fertility Interrelationships: Implications for Policy and Action*

food resources: *see Agricultural Production Efficiency; Arid Lands of Sub-Saharan Africa; Biological Oceanography: Some Critical Issues, Problems, and Recommendations; An International Centre for Manatee Research; Long-Term Worldwide Effects of Multiple Nuclear-Weapons Detonations; Nutrition and Fertility Interrelationships: Implications for Policy and Action; Population and Food: Crucial Issues; The Winged Bean: A High-Protein Crop for the Tropics; see also agriculture; climate; health; social problems*

Ford, Gerald, U.S. President, requested that National Academy of Sciences design a program to mobilize U.S. resources to improve world food and nutrition—Autumn, 4

Fossil Fuel Resources, Subpanel on, Panel on the Estimation of Mineral Reserves and Resources, NRC Committee on Mineral Resources and the Environment: *see Mineral Resources and the Environment*

Fowler, William A., of California Institute of Technology, scheduled to speak at special symposium in recognition of National Science Foundation's 25th anniversary at NAS annual meeting April 21, 1975—Feb, 2

Fox, René C., of University of Pennsylvania, elected to NAS Institute of Medicine—Autumn, 5

Frauenfelder, Hans, of University of Illinois, elected to National Academy of Sciences—Apr, 2

Fredrickson, Donald S., president of NAS Institute of Medicine, scheduled to address plenary session at NAS-NAE annual meetings April 23, 1975—Feb, 1

Friedlander, Sheldon K., of California Institute of Technology, elected to National Academy of Engineering—Apr, 6

Fultz, Dave, of University of Chicago, elected to National Academy of Sciences—Apr, 2

G arabedian, Paul R., of Courant Institute of Mathematical Sciences, New York University, elected to National Academy of Sciences—Apr, 2

Garwin, Richard L., of IBM Corp., Thomas J. Watson Research Center, elected to NAS Institute of Medicine—Autumn, 5

Geophysics Research Board, National Research Council: *see An Assessment of the Impact of World Data Centers on Geophysics*

Giaever, Ivar, of General Electric Co., elected to National Academy of Engineering—Apr, 6

Gilman, John J., of Allied Chemical Corp., elected to National Academy of Engineering—Apr, 6

Goddard, David R., of University of Pennsylvania, elected NAS home secretary for four-year term, succeeding A. V. Astin—Apr, 1

Goldberg, Edward D., of Scripps Institution of Oceanography, chaired NRC Ocean Affairs Board study panel reporting on *Assessing Potential Ocean Pollutants*; quoted—Jan, 2

Goldberg, Leo, of Kitt Peak National Observatory, chaired NAS Astronomy Manpower Committee reporting on *Employment Problems in Astronomy*—Mar, 2

Gomory, Ralph E., of IBM Corp., elected to National Academy of Engineering—Apr, 6

Goody, Richard M., of Harvard University, chaired NRC Space Science Board reporting on *Opportunities and Choices in Space Science, 1974*—Jan, 1

Gordon, Roy G., of Harvard University, elected to National Academy of Sciences—Apr, 2

Gordon, William E., of Rice University, elected to National Academy of Engineering—Apr, 6

Gottschalk, Carl W., of University of North Carolina and American Heart Association, elected to National Academy of Sciences—Apr, 2

Graduate School Adjustments to the "New Depression" in Higher Education, National Board on Graduate Education (joint board of National Research Council, Social Science Research Council, American Council on Education, and American Council of

Learned Societies), staff study on U.S. impact of recent economic change on U.S. graduate departments and doctoral enrollments since 1967. Excerpts from the board's commentary and interpretation of findings conclude with need for continuous monitoring and assessment of issues investigated in this project, and for high research priority to current and prospective U.S. ability to conduct scholarly and scientific research—Feb, 6-8

Granger, John V. N., of Federal Council for Science and Technology, elected to National Academy of Engineering—Apr, 7

Gray, Paul E., of Massachusetts Institute of Technology, elected to National Academy of Engineering—Apr, 7

Griggs, David T., NAS member, died December 31, 1974—Jan, 3

Griliches, Zvi, of Harvard University, elected to National Academy of Sciences—Apr, 2

Gross, Robert E., of Harvard University Medical School, elected to National Academy of Sciences—Apr, 2

Gunsalus, Irwin C., of University of Illinois, Urbana, elected to three-year term on NAS Council—Apr, 1

Gutowsky, H. S., of University of Illinois, Urbana-Champaign, member of NAS Committee on Science and Public Policy; chairs NRC Panel on Atmospheric Chemistry studying effects of stratospheric contaminants—Mar, 1

Hackerman, Norman, chairman of National Science Board, co-chairman (with H. E. Carter) of special NAS symposium in recognition of National Science Foundation's 25th anniversary scheduled for NAS annual meeting April 21, 1975—Feb, 2

Handler, Philip, elected to second six-year term as president of National Academy of Sciences; also serves as National Research Council chairman—Feb, 1; announced "Policy on Public Access to Information Concerning Studies Conducted Under the Auspices of the National Academy of Sciences"—May, 1; letter transmitting NRC report *Long-Term Worldwide Effects of Multiple Nuclear-Weapons Detonations to U.S. Arms Control and Disarmament Agency* warns that anticipated consequences of a major nuclear exchange underscore the urgency of reducing the world's nuclear arsenal—Autumn, 1, 6-7; text of letter—Autumn, 7-8

Harris, Cyril M., of Columbia University, elected to National Academy of Engineering—Apr, 7

Harris, Milton, of Harris Research Laboratories, chaired NRC Committee on Jojoba Utilization reporting on *Products from Jojoba: A Promising New Crop for Arid Lands*—May, 2

Haurowitz, Felix M., of Indiana University, elected to National Academy of Sciences—Apr, 2

Hawkins, W. Lincoln, of Bell Laboratories, Inc., elected to National Academy of Engineering—Apr, 7

Hayles, Amos H., University of North Carolina sociologist, chaired NRC Social Science Panel on the Significance of Community in the Metropolitan Environment reporting on *Toward an Understanding of Metropolitan America*—May, 4

Hayes, Thomas J., III, of International Engineering Co., Inc., elected to National Academy of Engineering—Apr, 7

Hayes, Wallace D., of Princeton University, elected to National Academy of Engineering—Apr, 7

health: see *Air Quality and Stationary Source Emission Control; Assessing Potential Ocean Pollutants; Controls on Health Care; Environmental Impact of Stratospheric Flight: Biological and Climatic Effects of Aircraft Emissions in the Stratosphere; Ethics of Health Care; Implications of Declining Pediatric Hospitalization Rates, NRC Committee on; Legalized Abortion and the Public Health; Long-Term Worldwide Effects of Multiple Nuclear-Weapons Detonations; Nickel (Medical and Biologic Effects of Environmental Pollutants); Nutrition and Fertility Interrelationships: Implications for Policy and Action; Petroleum in the Marine Environment; see also food resources*

Health, Education, and Welfare, U.S. Department of: see Implications of Declining Pediatric Hospitalization Rates, NRC Committee on; *Products from Jojoba: A Promising New Crop for Arid Lands*

Heffner, Hubert, NAE member, died April 1, 1975—Apr, 4

Hellegers, Andre E., of Georgetown University, quoted from NAS Institute of Medicine conference report *Ethics of Health Care*—Jan, 4

Henle, Werner, of University of Pennsylvania School of Medicine, elected to National Academy of Sciences—Apr, 2

Henry, David D., of University of Illinois, chairman of National Board on Graduate Education, which issued report *Graduate School Adjustments to the "New Depression" in Higher Education*—Feb, 6

Hill, Genevieve T., of Atlanta University School of Social Work, elected to NAS Institute of Medicine—Autumn, 5

Hill, Robert (Robin), of University of Cambridge, England, elected NAS foreign associate—Apr, 8

Hill, Robert L., of Duke University, elected to National Academy of Sciences—Apr, 2

Hodge, Sir William, NAS foreign associate, died July 7, 1975—Autumn, 3

Holm, Richard H., of Massachusetts Institute of Technology, elected to National Academy of Sciences—Apr, 2

Hornbeck, John A., of Bell Laboratories, Inc., elected to National Academy of Engineering—Apr, 7

Horsfall, James G., of Connecticut Agricultural Experiment Station, chaired NRC Committee on Agricultural Production Efficiency reporting on *Agricultural Production Efficiency*—Jan, 6

Horstmann, Dorothy M., of Yale University School of Medicine, elected to National Academy of Sciences—Apr, 2

Housing and Urban Development, U.S. Department of: see *Evaluating Integrated Utility Systems*

Hrones, John A., of Bell Laboratories, Inc., elected to National Academy of Engineering—Apr, 7

Hubbert, M. King, 1962 NAS energy-resources report cited—Autumn, 4

Huebner, George J., Jr., of Chrysler Corp., elected to National Academy of Engineering—Apr, 7

Hurvich, Leo M., of University of Pennsylvania, elected to National Academy of Sciences—Apr, 2

Iklé, Fred C., director of U.S. Arms Control and Disarmament Agency, recipient of NAS President P. Handler's letter transmitting NRC report *Long-Term Worldwide Effects of Multiple Nuclear-Weapons Detonations* to the agency; quoted from October 1975 press conference where he warned that the uncertainties and risks inherent in nuclear war necessitate a program of substantial arms reduction to prevent accidental war as well as deliberate attack—Autumn, 7

Implications of Declining Pediatric Hospitalization Rates, NRC Committee on: organized to look at data on pediatric bed-occupancy rates and out-patient visits and recommend improved data-collection methods with the goal of planning adequate distribution of pediatric care resources; committee's work is supported with U.S. Department of Health, Education, and Welfare Office of Maternal and Child Health funds—Autumn, 2

Institute of Medicine, National Academy of Sciences: IOM, chartered in 1970, is NAS' principal unit for addressing issues of health policy; work and programs scheduled for discussion at NAS and NAE annual meetings—Feb., 1-2; 41 individuals were named to IOM membership for five-year terms, bringing total membership to 306—Autumn, 5 (list of names); *see also Controls on Health Care; Ethics of Health Care; Legalized Abortion and the Public Health; "Policy on Public Access to Information Concerning Studies Conducted Under the Auspices of the National Academy of Sciences"*

Integrated Utility Systems Board, National Academy of Engineering: *see Evaluating Integrated Utility Systems*

international affairs: *see Arid Lands of Sub-Saharan Africa; An Assessment of the Impact of World Data Centers on Geophysics; An International Centre for Manatee Research; Long-Term Worldwide Effects of Multiple Nuclear-Weapons Detonations; Marine Scientific Research and the Third Law of the Sea Conference; Mineral Resources and the Environment; Nutrition and Fertility Interrelationships: Implications for Policy and Action; Petroleum in the Marine Environment; Population and Food: Crucial Issues; see also agriculture; food resources*
An International Centre for Manatee Research, report of a 1974 workshop sponsored by U.S. National Academy of Sciences, Guyana National Science Research Council, and International Development Research Centre of Canada; proposes international center for basic research in manatee biology, studies of manatees as weed-control agents, manatee conservation studies, and broader tropical science—Mar., 8

International Council of Scientific Unions: *see An Assessment of the Impact of World Data Centers on Geophysics; Marine Scientific Research and the Third Law of the Sea Conference*

International Nutrition Programs, Committee on, NRC Food and Nutrition Board: *see Nutrition and Fertility Interrelationships: Implications for Policy and Action*

Jablon, Seymour, of National Research Council's Medical Follow-up Agency, received 1975 *National Academy of Sciences Award for Distinguished Service*—Apr., 3
 Jacobsen, Lydik S., of Atherton, Calif., elected to National Academy of Engineering—Apr., 7
 Jameson, Dorothea, of University of Pennsyl-

vania, elected to National Academy of Sciences—Apr., 3
 Jerne, Niels Kaj, director of Basel Institute for Immunology, Switzerland, elected NAS foreign associate—Apr., 8
Jojoba Utilization, NRC Committee on: see Products from Jojoba: A Promising New Crop for Arid Lands
 Jonsen, Albert R., S. J., of University of California School of Medicine, San Francisco, quoted from NAS Institute of Medicine conference report *Ethics of Health Care*—Jan., 4
 Jordan, Richard C., of University of Minnesota, elected to National Academy of Engineering—Apr., 7
 Julian, Percy L., NAS member, died April 19, 1975—Apr., 4
 Juster, Thomas, of University of Michigan, chairs NRC Committee on Measurement of Energy Consumption: Data Needs and Methodologies studying data needs for energy policy questions—Autumn, 2

Kahn, Herman, quoted—Autumn, 1
 Kates, Robert W., of Clark University Graduate School of Geography, elected to National Academy of Sciences—Apr., 3
 Kellermann, Kenneth I., of National Radio Astronomy Observatory, elected to National Academy of Sciences—Apr., 3
 Kerr, I. Lawrence, dentist, Endicott, N.Y., elected to NAS Institute of Medicine—Autumn, 5
 Kiefer, Jack C., of Cornell University, elected to National Academy of Sciences—Apr., 3
 Kilby, Jack S., consultant, Dallas, received *Fourth Vladimir K. Zworykin Award* at NAE annual meeting—Apr., 8
 Kingery, W. David, of Massachusetts Institute of Technology, elected to National Academy of Engineering—Apr., 7
 Knuth, Donald E., of Stanford University, elected to National Academy of Sciences—Apr., 3
 Kodaira, Kunihiko, of Tokyo University, Japan, elected NAS foreign associate—Apr., 8
 Krevans, Julius R., of University of California School of Medicine, San Francisco, elected to NAS Institute of Medicine—Autumn, 5
 Kuh, Ernest S., of University of California, Berkeley, elected to National Academy of Engineering—Apr., 7

Lachenbruch, Arthur H., of U.S. Geologi-

cal Survey, elected to National Academy of Sciences—Apr., 3
 de Laguna, Frederica A., of Bryn Mawr College, elected to National Academy of Sciences—Apr., 2
 Lal, Devendra, of Physical Research Laboratory, Ahmedabad, India, elected NAS foreign associate—Apr., 8
 Langford, H. Dale, appointed assistant editor of *News Report*—Autumn, 4
law: see Legalized Abortion and the Public Health; Marine Scientific Research and the Third Law of the Sea Conference; Protecting Individual Privacy in Evaluation Research
Law of the Sea: see Marine Scientific Research and the Third Law of the Sea Conference
 Lee, Erastus H., of Stanford University, elected to National Academy of Engineering—Apr., 7
 Lee, Thomas H., of General Electric Co., elected to National Academy of Engineering—Apr., 7
Legalized Abortion and the Public Health, NAS Institute of Medicine, study group report finds risks of illegal abortions "clearly greater" than those associated with legal abortion, with evidence suggesting that legislation and practices permitting abortions in proper medical surroundings will lead to fewer deaths and lower rate of complications—May, 1
 Levine, Sol, of Boston University, elected to NAS Institute of Medicine—Autumn, 5
 Lewis, Warren K., NAS and NAE member, died March 9, 1975—Apr., 4
 Lewis, W. Deming, of Lehigh University, re-elected to three-year term on NAE Council—Apr., 1
 Liebowitz, Harold, of George Washington University, elected to National Academy of Engineering—Apr., 7
 Lindzey, Gardner, of University of Texas, Austin, elected to NAS Institute of Medicine—Autumn, 5
Long-Term Worldwide Effects of Multiple Nuclear-Weapons Detonations, NRC Committee to Study the Long-Term Worldwide Effects of Multiple Nuclear-Weapons Detonations, study undertaken at U.S. Arms Control and Disarmament Agency request considers extended, interrelated biological and physical environmental effects that might be expected from a series of nuclear explosions for countries not directly involved. Report assesses possible consequences of radioactive fallout, reduction of stratospheric ozone, and other factors on atmospheric and climate, natural and managed terrestrial ecosystems, aquatic environment, and human health. Expected adverse effects include incapacitating cases of sunburn or snow blindness,

increase in cancer death rate and significant genetic diseases for many generations, disruption of world agriculture and food production, and unpredictable climatic changes—Autumn, 1, 6-7; report findings and summary of evidence reprinted—Autumn, 9-12; NAS President Philip Handler warns, in letter transmitting report to Arms Control and Disarmament Agency, that—although report indicates immediate physical and biological consequences of a major nuclear exchange may be less prolonged and severe for non-participating nations than had been feared—the “economic, social, and political consequences of the resultant worldwide terror are entirely unpredictable”—Autumn, 6-7; text of letter—Autumn, 7-8; Arms Control and Disarmament Agency director F. C. Iklé concurred that the intolerable risks of ecological backlash for human society necessitate a program of substantial nuclear arms reduction to prevent accidental war as well as deliberate attack—Autumn, 7

Loomis, Alfred L., NAS member, died August 11, 1975—Autumn, 3

Lorenz, Edward N., of Massachusetts Institute of Technology, elected to National Academy of Sciences—Apr, 3

McAtee, Patricia A., of University of Colorado Medical Center, elected to NAS Institute of Medicine—Autumn, 5

Maccoby, Eleanor E., of Stanford University, elected to NAS Institute of Medicine—Autumn, 5

manatees: *see An International Centre for Manatee Research*

Margolish, Emanuel, of Northwestern University, elected to National Academy of Sciences—Apr, 3

Marine Scientific Research and the Third Law of the Sea Conference, NAS-NRC U.S. National Committee for the Scientific Committee on Oceanic Research, of the International Council of Scientific Unions, report analyzes alternative ocean-research legal regimes under consideration by law-of-the-sea negotiators and urges adoption of a regime to protect coastal state interests while fostering oceanographic research that will serve the needs of the world community. Citing needs of all nations for understanding oceanic processes affecting climate, hence agriculture, and fisheries, committee favors an “internationally established standards regime for marine scientific research conducted in the economic zone” as best serving world community interests, protecting coastal state interests, and honoring the Common Heri-

tage of Mankind concept—Jan, 1

Mason, Edward A., of U.S. Nuclear Regulatory Commission, elected to National Academy of Engineering—Apr, 7

Mathews, Max V., of Bell Laboratories Behavioral and Statistical Research Center, elected to National Academy of Sciences—Apr, 3

Matthews, Drummond H., of University of Cambridge, received, with F. J. Vine, the *Arthur L. Day Prize and Lectureship* at NAS annual meeting—Apr, 3

Mead, Margaret, of American Museum of Natural History, elected to National Academy of Sciences—Apr, 3

Measurement of Energy Consumption: Data Needs and Methodologies, NRC Committee on: organized at Federal Energy Administration request for NRC advice on design and collection of energy-demand statistics, new committee, in cooperation with NRC Committee on National Statistics and Board on Energy Studies, is considering major policy questions relating to energy to determine kinds of data needed and develop appropriate data-collection methods—Autumn, 2

Mechanic, David, of University of Wisconsin, quoted from NAS Institute of Medicine conference report *Ethics of Health Care*—Jan, 5

Medical and Biologic Effects of Environmental Pollutants, NRC Committee on: prepares summary reports primarily on air pollutants for U.S. Environmental Protection Agency—Autumn, 2; *see also Nickel (Medical and Biologic Effects of Environmental Pollutants)*

Medicare and Medicaid: *see Controls on Health Care*

Meister, Alton, of Cornell University Medical College, elected to NAS Institute of Medicine—Autumn, 5

Mendes da Rocha, Manuel Coelho, director of National Civil Engineering Laboratory, Portugal, elected NAS foreign associate—Apr, 8

Merchant, M. Eugene, of Cincinnati Milacron Inc., elected to National Academy of Engineering—Apr, 7

Mertz, Edwin T., of Purdue University, elected to National Academy of Sciences—Apr, 3

Michael, Harold L., of Purdue University, elected to National Academy of Engineering—Apr, 7

Middleton, John T., named to receive 1975 *National Academy of Sciences Award in Environmental Quality*, in honor of Frederick Gardner Cottrell—Apr, 3

Millar, Gordon H., of Deere & Co., elected to National Academy of Engineering—Apr, 7

Milliken, Frank R., of Kennecott Copper

Corp., elected to National Academy of Engineering—Apr, 7

Mineral Resources and the Environment, NRC Committee on Mineral Resources and the Environment, wide-ranging report is basically a compilation of panel reports considering the kinds of interrelationships between environment and materials (including energy materials) that ought to be taken into account in the shaping of public policy, and suggesting areas in need of study. Discussion finds the state of the art of estimating oil and gas reserves unsatisfactory, with the best interpretation implying that a large increase in U.S. production of oil and gas is unlikely; thus conservation of fossil fuels and preference for energy-efficient technologies are indispensable to a sound U.S. energy policy. Panel on the Estimation of Mineral Reserves and Resources looked at implications and methods and quality of resource estimates for fossil fuels and for copper, with help from its Subpanel on Fossil Fuel Resources; Panel on Demand for Fuel and Mineral Resources urged attention to policy alternatives that limit demand; other panels considered health effects of small particulates and coal mining, pollution worries of seabed mining, engineering and economic problems—Feb, 1, 4-5

Moody, John D., petroleum consultant, served on Subpanel on Fossil Fuel Resources, Panel on the Estimation of Mineral Reserves and Resources, NRC Committee on Mineral Resources and the Environment—Feb, 4

Morales, Manuel F., of University of California School of Medicine, San Francisco, elected to National Academy of Sciences—Apr, 3

Morgan, James N., of University of Michigan, elected to National Academy of Sciences—Apr, 3

Moses, Lincoln E., of Stanford University, elected to NAS Institute of Medicine—Autumn, 5

Mountcastle, Vernon B., of Johns Hopkins University School of Medicine, elected to NAS Institute of Medicine—Autumn, 5

Mueller, Erwin W., of Pennsylvania State University, elected to National Academy of Sciences—Apr, 3; elected to National Academy of Engineering—Apr, 7

Mumford, David B., of Harvard University, elected to National Academy of Sciences—Apr, 3

Murphy, Franklin D., of Times-Mirror Corp., elected to NAS Institute of Medicine—Autumn, 5

Murray, Robert F., Jr., of Howard University College of Medicine, elected to NAS Institute of Medicine—Autumn, 5

Myers, Jack E., of University of Texas, Austin, elected to National Academy of Sciences—Apr, 3

National Academy of Engineering, U.S.: plans for 1975 annual meeting April 23-24 explored—Feb, 1-2; C. D. Perkins was elected NAE president for remaining three years of term vacated by R. C. Seamans, Jr.; named to NAE Council were R. H. Cannon, Jr., and R. G. Folsom, and re-elected were W. K. Davis and W. D. Lewis—Apr, 1; 86 U.S. scientists were honored by election to NAE membership—Apr, 6-8 (list of names and NAE citations); 1975 *Founders Medal* was presented to J. B. Fisk, *Fourth Vladimir K. Zworykin Award* to J. S. Kilby—Apr, 8; *see also Evaluating Integrated Utility Systems*; “Policy on Public Access to Information Concerning Studies Conducted Under the Auspices of the National Academy of Sciences”

National Academy of Sciences, U.S.: plans for 1975 annual meeting April 21-23 explored—Feb, 1-2; P. Handler elected to second six-year term as NAS president; changes since he took office discussed—Feb, 1-2; at 1975 annual meeting, D. R. Goddard was elected NAS home secretary (succeeding A. V. Astin); named to NAS Council were N. Bloembergen, B. Crawford, Jr., I. C. Gunsalus, F. Press (succeeding L. M. Branscomb, P. Cloud, H. Eagle, F. H. Westheimer)—Apr, 1; 84 scientists were elected to NAS membership, and 12 named as foreign associates—Apr, 2-3, 8; B. M. Alberts, J. M. Beckers, G. M. Clemence, S. Jablon, D. H. Matthews, J. T. Middleton, F. J. Vine, J. T. Wilson, L. Woltjer were honored with awards—Apr, 3; Council issued “Policy on Public Access to Information Concerning Studies Conducted Under the Auspices of the National Academy of Sciences”—May, 1

National Aeronautics and Space Administration, U.S.: *see Environmental Impact of Stratospheric Flight: Biological and Climatic Effects of Aircraft Emissions in the Stratosphere; Opportunities and Choices in Space Science, 1974*

National Board on Graduate Education: *see Graduate School Adjustments to the “New Depression” in Higher Education*

National Research Council, National Academy of Sciences: new Articles of Organization provide for assemblies and commissions, with Governing Board members drawn from NAS Council, NAE Council, and IOM members—Feb, 1-2; *see also “Policy on Public Access to Information Concerning*

Studies Conducted Under the Auspices of the National Academy of Sciences”
National Science Foundation: special symposium in recognition of 25th anniversary of NSF scheduled for NAS annual meeting April 21, 1975—Feb, 1; *see also Science and Public Policy, NAS Committee on; Population and Food: Crucial Issues*

National Statistics, NRC Committee on: *see Measurement of Energy Consumption: Data Needs and Methodologies, NRC Committee on*

Natural Resources, NRC Commission on, of the National Academy of Sciences and National Academy of Engineering: *see Air Quality and Stationary Source Emission Control*

Nelson, Alan R., of Memorial Medical Center, Salt Lake City, elected to NAS Institute of Medicine—Autumn, 5

News Report: schedule and format changes described—Autumn, 1

Nickel (Medical and Biologic Effects of Environmental Pollutants), NRC Committee on Medical and Biologic Effects of Environmental Pollutants, panel report reviews literature on effects of environmental nickel and concludes that natural concentration in waters, soils, and foods do not constitute a biologic threat but increased amounts in the biosphere “should be viewed with caution”; recommendations include standardized monitoring of atmospheric nickel, protective measures and health monitoring in occupational exposure situations, epidemiologic studies, and nickel toxicology studies—Mar, 1

Nier, Alfred O. C., of University of Minnesota, chaired NRC Committee to Study the Long-Term Worldwide Effects of Multiple Nuclear-Weapons Detonations reporting on *Long-Term Worldwide Effects of Multiple Nuclear-Weapons Detonations*—Autumn, 6, 7

Nisbet, Ian C. T., of Massachusetts Audubon Society, chairs NRC Coordinating Committee on Scientific and Technical Assessments of Environmental Pollutants organized to study adequacy of information on pollutants—Autumn, 2

Nutrition and Fertility Interrelationships: Implications for Policy and Action, Subcommittee on Nutrition and Fertility, NRC Food and Nutrition Board’s Committee on International Nutrition Programs, workshop report urges integration of nutrition and family-planning services to break cycle of malnutrition, ill health, and uncontrolled fertility confronting assistance agencies. Report recommends worldwide program sponsoring education on human lactation to

encourage breast-feeding; policies promoting better nutrition for young females that aim to postpone child-bearing; cautious joining or parallel delivery of nutrition and family-planning services with less specialization of field workers; and adaptation of social services to requirements of rapidly urbanizing areas in poorer countries—Apr, 1, 4-5

Oblad, Alex G., of University of Utah, elected to National Academy of Engineering—Apr, 7

Ocean Affairs Board, National Research Council: *see Assessing Potential Ocean Pollutants; Biological Oceanography: Some Critical Issues, Problems, and Recommendations; Petroleum in the Marine Environment*

oceans: *see Assessing Potential Ocean Pollutants; Biological Oceanography: Some Critical Issues, Problems, and Recommendations; Marine Scientific Research and the Third Law of the Sea Conference; Petroleum in the Marine Environment*

Ocean Science Committee, NRC Ocean Affairs Board: *see Biological Oceanography: Some Critical Issues, Problems, and Recommendations*

O’Neill, Russell R., of University of California, Los Angeles, elected to National Academy of Engineering—Apr, 7

Öpik, Ernst J., of Armagh Observatory, Northern Ireland, elected NAS foreign associate—Apr, 8

Opportunities and Choices in Space Science, 1974, NRC Space Science Board, report recommends priorities for new project starts by Office of Space Science of U.S. National Aeronautics and Space Administration, urging Fiscal 1976 start for the Large Space Telescope as part of a well-balanced space-astronomy program to include high-energy, infrared, and solar astronomy; board reiterated support for High-Energy Astronomy Observatories A, B, C, Pioneer Venus, and Mariner Jupiter Saturn—Jan, 1

Osterberg, Jorj O., of Northwestern University, elected to National Academy of Engineering—Apr, 7

Pask, Joseph A., of University of California, Berkeley, elected to National Academy of Engineering—Apr, 7

Penzias, Arno A., of Bell Laboratories, Inc., elected to National Academy of Sciences—Apr, 3

Perkins, Courtland D., of Princeton University's School of Engineering and Applied Science, elected NAE president (who also serves as NRC vice chairman) for remaining three years of term vacated by R. C. Seamans, Jr.; to succeed R. H. Cannon, Jr., as chairman of NRC Assembly of Engineering July 1—Apr, 1

Petroleum in the Marine Environment, NRC Ocean Affairs Board, report of 1973 Workshop on Inputs, Fates, and the Effects of Petroleum in the Marine Environment reviews the state of knowledge of effects of petroleum in the ocean and urges continued efforts for international control of inputs and for research to reduce our current level of uncertainty as to widespread environmental impact. Excerpts from report describe need for more information on rates of sedimentation and coastal deposit of petroleum residue, rates of biodegradation, effects on marine life and sea birds, possible effects on human health, and efficacy of clean-up techniques—Jan, 2-3

Petrone, Rocco A., of National Aeronautics and Space Administration, elected to National Academy of Engineering—Apr, 7

Platt, Joseph B., Harvey Mudd College president, scheduled to speak at symposium in recognition of National Science Foundation's 25th anniversary at NAS annual meeting April 21, 1975—Feb, 2

"Policy on Public Access to Information Concerning Studies Conducted Under the Auspices of the National Academy of Sciences," policy statement issued by NAS Council and endorsed by councils of National Academy of Engineering and NAS Institute of Medicine declares studies by the Academy and its associated institutions "should be conducted under conditions of openness so that the public may be aware of the procedures and information utilized"; statement calls upon Governing Board of the National Research Council to adopt public-access guidelines consistent with this policy—May, 1; text of the policy—May, 1, 3

population: see *Legalized Abortion and the Public Health; Nutrition and Fertility Interrelationships: Implications for Policy and Action; Population and Food: Crucial Issues; see also food resources; social problems*

Population and Food: Crucial Issues, NRC Committee on World Food, Health and Population, study funded jointly by the Academy and the National Science Foundation is first in two-part response to 1974 task group request for NAS action on interrelated problems of world food, health, and

population. Report concludes that food supply problems are manageable for the next five or ten years but alarming thereafter unless population growth-rate declines. Needed are a worldwide food distribution system responsive to regional disasters; major expansion of agricultural science and technology to produce adequate food supplies and reserves; establishment of national goals for food production and stabilizing population, with developed nations helping less developed nations towards the essential goal of food self-sufficiency—Autumn, 4-5; second phase of NRC's efforts to understand the overall problem is a more comprehensive study taking its direction from 1974 Presidential request that the Academy design a program to mobilize U.S. resources to improve world food and nutrition—Autumn, 4

Potter, Van Rensselaer, of University of Wisconsin, Madison, elected to National Academy of Sciences—Apr, 3

President's Science Advisory Committee Panel on the World Food Supply: findings of 1967 report cited—Autumn, 4

Press, Frank, of Massachusetts Institute of Technology, elected to three-year term on NAS Council—Apr, 1

Price, Paul B., Jr., of University of California, Berkeley, elected to National Academy of Sciences—Apr, 3

Products from Jojoba: A Promising New Crop for Arid Lands, NRC Committee on Jojoba Utilization, scientific and technical assessment of practical uses of jojoba oil (based on results of tests initiated by Indian Division of U.S. Office of Economic Opportunity) finds jojoba has extensive commercial possibilities as a substitute for existing oils and waxes such as sperm oil, carnauba wax, beeswax, and spermaceti. Committee believes jojoba can be exploited to economic benefit in poverty-beset North American desert areas where it grows wild as well as in other arid lands, and recommends expanding jojoba programs (now sponsored by U.S. Department of Health, Education, and Welfare) to give Arizona and Southern California Indians jojoba-based industries. "The future of jojoba lies in developing it into a cultivated crop"—May, 2-3

Protecting Individual Privacy in Evaluation Research, NRC Committee on Federal Agency Evaluation Research, report considers issues of conduct and use of social research following U.S. Office of Economic Opportunity request for advice on ways of reconciling conflicting desiderata of privacy protection and government accountability in the use of tax dollars. Committee concluded

fuller public debate is needed to formulate definitive procedures that ensure both individual privacy protection and adequate social research data; recommended are strong guidelines providing physical protection of data from "unauthorized misuse," and guarantees providing legal protection against "official misuse"—Autumn, 3

Public Access to Information Concerning Studies Conducted Under the Auspices of the National Academy of Sciences, Policy on: see "Policy on Public Access to Information Concerning Studies Conducted Under the Auspices of the National Academy of Sciences"

Public Engineering Policy, NRC Committee on: see *Air Quality and Stationary Source Emission Control*

Quate, Calvin F., of Stanford University, elected to National Academy of Sciences—Apr, 3

Radner, Roy, of University of California, Berkeley, elected to National Academy of Sciences—Apr, 3

Rapid Population Growth: Consequences and Policy Implications, 1971 NAS study committee report, cited—Autumn, 4

Rees, Martin, Plumian professor at University of Cambridge, scheduled to present Robertson Memorial Lecture at NAS annual meeting April 21, 1975—Feb, 1

Reese, Lymon C., of University of Texas, Austin, elected to National Academy of Engineering—Apr, 7

Reichl, Eric H., of Conoco Coal Development Co., elected to National Academy of Engineering—Apr, 7

resources: see *Air Quality and Stationary Source Emission Control; Evaluating Integrated Utility Systems; Mineral Resources and the Environment*

Ringwood, Alfred E., of Australian National University, Canberra, elected NAS foreign associate—Apr, 8

Robertson, Leslie E., of Skilling, Helle, Christiansen, Robertson, elected to National Academy of Engineering—Apr, 7

Robinson, Sir Robert, NAS foreign associate, died February 8, 1975—Feb, 3

Rockefeller Foundation: see *Arid Lands of Sub-Saharan Africa*

Rohsenow, Warren M., of Massachusetts Institute of Technology, elected to National Academy of Engineering—Apr, 7

Rose, Albert, of RCA Laboratories' David Sarnoff Research Center, elected to National Academy of Engineering—Apr, 7
 Rowe, Wallace P., of National Institute of Allergy and Infectious Diseases, elected to National Academy of Sciences—Apr, 3
 Ryle, Sir Martin, of Mullard Radio Astronomy Observatory, University of Cambridge, England, elected NAS foreign associate—Apr, 8

Schneiderman, Howard A., of University of California at Irvine, elected to National Academy of Sciences—Apr, 3
 Schuck, Peter H., of Consumers Union, quoted from NAS Institute of Medicine conference report *Ethics of Health Care*—Jan, 5
 Schwan, Herman P., of University of Pennsylvania, elected to National Academy of Engineering—Apr, 7
 Schwartz, Melvin, of Stanford University, elected to National Academy of Sciences—Apr, 3
 Schwartzwalder, Karl, NAE member, died May 2, 1975—Autumn, 3
 Science and Public Policy, NAS Committee on: study funded by National Science Foundation Office of Planning and Resources Management is underway to consider the process of government decision behind the distribution of research funds and the efficacy of the peer-review system—Autumn, 1-2; *see also Employment Problems in Astronomy*
 Science and Technology for International Development, NRC Board on: *see Arid Lands of Sub-Saharan Africa; The Winged Bean: A High-Protein Crop for the Tropics*
 Scientific and Technical Assessments of Environmental Pollutants, NRC Coordinating Committee on: organized to help Environmental Protection Agency provide information on environmental pollutants that may require regulation, committee will look at adequacy of information on origins, movement, fates, effects, and control of air, land, and water pollutants to determine basis for regulatory decisions and research needs—Autumn, 2
 Scientific Committee on Oceanic Research, of the International Council of Scientific Unions, NAS-NRC U.S. National Committee for: *see Marine Scientific Research and the Third Law of the Sea Conference*
 Scott, W. Richard, of Stanford University, elected to NAS Institute of Medicine—Autumn, 5
 Seamans, Robert C., Jr., resigned NAE presidency (succeeded by C. D. Perkins) to

become administrator of U.S. Energy Research and Development Administration—Apr, 1
 Shannon, Iris R., of Rush University College of Nursing, elected to NAS Institute of Medicine—Autumn, 5
 Shires, G. Tom, of University of Washington School of Medicine, elected to NAS Institute of Medicine—Autumn, 5
 Shoupp, William E., acting NAE president since December 1975, continues as vice president of NAE following C. D. Perkins' election as president—Apr, 1
 Shull, Clifford G., of Massachusetts Institute of Technology, elected to National Academy of Sciences—Apr, 3
 Siekvetz, Philip, of Rockefeller University, elected to National Academy of Sciences—Apr, 3
 Simmons, Howard E., Jr., of E. I. du Pont de Nemours & Co., Inc., and University of Delaware, elected to National Academy of Sciences—Apr, 3
 Sinfelt, John H., of Exxon Research and Engineering Co., elected to National Academy of Engineering—Apr, 7
 Sinkford, Jeanne C., of Howard University College of Dentistry, elected to NAS Institute of Medicine—Autumn, 5
 Skinner, Brian J., of Yale University, chaired NRC Committee on Mineral Resources and the Environment reporting on *Mineral Resources and the Environment*—Feb, 4
 Smith, Joe M., of University of California, Davis, elected to National Academy of Engineering—Apr, 7
 Smith, Robert L., of University of Kansas, elected to National Academy of Engineering—Apr, 7
 social problems: *see Agricultural Production Efficiency; Controls on Health Care; Ethics of Health Care; Graduate School Adjustments to the "New Depression" in Higher Education; Legalized Abortion and the Public Health; Long-Term Worldwide Effects of Multiple Nuclear-Weapons Detonations; Nutrition and Fertility Interrelationships: Implications for Policy and Action; Population and Food: Crucial Issues; Products from Jojoba: A Promising New Crop for Arid Lands; Protecting Individual Privacy in Evaluation Research; Toward an Understanding of Metropolitan America; see also food resources; population*
 Social Science Panel on the Significance of Community in the Metropolitan Environment, National Research Council: *see Toward an Understanding of Metropolitan America*
 Sokolov, Eugene Nikolaevich, of Moscow M. V. Lomonosov State University, U.S.S.R., elected NAS foreign associate—Apr, 8
 Solar Energy Research Institute Committee, National Research Council: addresses questions related to setting up and running the governmental Solar Energy Research Institute mandated by the Solar Energy Research, Development, and Demonstration Act of 1974. As requested by U.S. Energy Research and Development Administration, committee is considering such issues as the institute's role and mission; scope of research; management structure and relationship to ERDA; interactions with universities, industry, ERDA National Laboratories, and other government organizations; location of the center or centers; and responsiveness to changing national needs—May, 3
 Solomon, David H., of University of California School of Medicine, Los Angeles, elected to NAS Institute of Medicine—Autumn, 5
 Souders, Mott, NAE member, died December 11, 1974—Jan, 3
 space: *see Atmospheric Chemistry, NRC Panel on; Opportunities and Choices in Space Science, 1974*
 Space Science Board, National Research Council: *see Opportunities and Choices in Space Science, 1974*
 Spicer, Edward H., of University of Arizona, elected to National Academy of Sciences—Apr, 3
 Spivak, Jonathan, health-affairs reporter for *Wall Street Journal*, served as rapporteur at 1974 NAS Institute of Medicine Conference; his observations on 'Imposing Better Methods of Cost Control on the Health Industry' reprinted from conference proceedings *Controls on Health Care*—May, 6-7; elected to NAS Institute of Medicine—Autumn, 5
 SST: *see Environmental Impact of Stratospheric Flight: Biological and Climatic Effects of Aircraft Emissions in the Stratosphere*
 Stein, Charles M., of Stanford University, elected to National Academy of Sciences—Apr, 3
 Steiner, Donald F., of University of Chicago, elected to National Academy of Sciences—Apr, 3
 Sternberg, Eli, of California Institute of Technology, elected to National Academy of Engineering—Apr, 7
 Stever, H. Guyford, National Science Foundation director, scheduled to speak at special NAS symposium in recognition of NSF's 25th anniversary at NAS annual meeting April 21, 1975—Feb, 2
 Stigler, George J., of University of Chicago, elected to National Academy of Sciences—Apr, 3

Straus, Robert, of University of Kentucky College of Medicine, elected to NAS Institute of Medicine—Autumn, 5
 Streisinger, George, of University of Oregon, elected to National Academy of Sciences—Apr, 3
 Strominger, Jack L., of Harvard University Biological Laboratories and Sidney Farber Cancer Center, elected to NAS Institute of Medicine—Autumn, 5
 Sullivan, Louis W., of Boston University School of Medicine, elected to NAS Institute of Medicine—Autumn, 5
 Swanson, August G., of Association of American Medical Colleges, elected to NAS Institute of Medicine—Autumn, 5

Tamm, Igor, of Rockefeller University, elected to National Academy of Sciences—Apr, 3
 Teuber, Hans-Lukas, of Massachusetts Institute of Technology, elected to NAS Institute of Medicine—Autumn, 5
 Thon, J. George, of Bechtel Corp., elected to National Academy of Engineering—Apr, 7
 Tien, Ping King, of Bell Laboratories, Inc., elected to National Academy of Engineering—Apr, 7
 Timmerhaus, Klaus D., of University of Colorado, elected to National Academy of Engineering—Apr, 7
Toward an Understanding of Metropolitan America, NRC Social Science Panel on the Significance of Community in the Metropolitan Environment, report of changing U.S. living patterns finds "community" more synonymous with "interest group" than with "neighborhood," and describes metropolitan areas as multicentered urban regions where social, fiscal, and public-service advantages are distributed inequitably. Panel concluded that traditional neighborhood, or micro-community, has become relatively less significant as a locus of interaction and a force in personality formation, surviving mainly as an institution of control over the immediate physical or public-service environment. Report finds costs and benefits of metropolitan expansion unevenly distributed, with dispersal of employment opportunities and activities in tandem with suburbanization of housing leading to increased segregation of blacks; present structure of government makes it more difficult to match needs and resources. While recent energy shortage may reverse the trend toward expansion, capacity to deal with urban inequities requires appreciation of interdependence and potential common interests among metropolitan people

and their leaders—May, 1, 4-5; excerpts from report discuss diversity of urban social structure, types of social interaction, and urban crime—May, 5
 Townsend, John W., Jr., of National Oceanic and Atmospheric Administration, elected to National Academy of Engineering—Apr, 7
 Transportation, U.S. Department of: *see Environmental Impact of Stratospheric Flight: Biological and Climatic Effects of Aircraft Emissions in the Stratosphere*

United Nations Law of the Sea Conference: *see Marine Scientific Research and the Third Law of the Sea Conference*
 United States Government: *see names of individual agencies*
 U.S. Senate Committee on Public Works: *see Air Quality and Stationary Source Emission Control*
 urban living: *see Toward an Understanding of Metropolitan America*

Vine, Fred J., of University of East Anglia, received, with D. H. Matthews, *Arthur L. Day Prize and Lectureship* at NAS annual meeting—Apr, 3

Watson, C. Gordon, of American Dental Association, elected to NAS Institute of Medicine—Autumn, 5
 weapons: *see Long-Term Worldwide Effects of Multiple Nuclear-Weapons Detonations*
 Weber, Gregorio, of University of Illinois, Urbana-Champaign, elected to National Academy of Sciences—Apr, 3
 Wegman, Myron E., of University of Michigan, chairs NRC Committee on Implications of Declining Pediatric Hospitalization Rates—Autumn, 2
 Weinberg, Alvin M., of Oak Ridge Institute for Energy Analysis, elected to National Academy of Engineering—Apr, 8
 Wenzel, James G., of Lockheed Missiles & Space Co., Inc., elected to National Academy of Engineering—Apr, 8
 Wessenauer, G. O., of Tennessee Valley Authority, chaired NAE Integrated Utility Systems Board reporting on *Evaluating Integrated Utility Systems*—Feb, 2
 Westergaard, Mogens C. W., NAS foreign associate, died June 8, 1975—Autumn, 3
 Westheimer, Frank H., to end term on NAS Council—Apr, 1
 Wheatley, John C., of Reveille College, University of California, elected to National Academy of Sciences—Apr, 3

White, David C., of Massachusetts Institute of Technology, elected to National Academy of Engineering—Apr, 8
 White, Harrison C., of Harvard University, elected to National Academy of Sciences—Apr, 3
 Whitman, Robert V., of Massachusetts Institute of Technology, elected to National Academy of Engineering—Apr, 8
 Whittaker, Robert H., of Cornell University, elected to National Academy of Sciences—Apr, 3
 Wiegel, Robert L., of University of California, Berkeley, elected to National Academy of Engineering—Apr, 8
 Wilke, Charles R., of University of California, Berkeley, elected to National Academy of Engineering—Apr, 8
 Wilkinson, Geoffrey, of University of London, England, elected NAS foreign associate—Apr, 8
 Willenbrock, F. Karl, of National Bureau of Standards, elected to National Academy of Engineering—Apr, 8
 Wilson, E. Bright, of Harvard University, chaired steering committee of NRC Ocean Affairs Board reporting on *Petroleum in the Marine Environment* following a 1973 workshop—Jan, 2
 Wilson, J. Tuzo, of Ontario Science Center, received *John J. Carty Medal* at NAS annual meeting—Apr, 3
 Wilson, Kenneth G., of Cornell University, elected to National Academy of Sciences—Apr, 3
The Winged Bean: A High-Protein Crop for the Tropics, NRC Board on Science and Technology for International Development, panel report focuses on indigenous tropical legume *Psophocarpus tetragonolobus* and its possibilities for cultivation in areas where protein malnutrition is common—Autumn, 4
 Wolter, Lodewijk, of European Southern Observatory, received *Benjamin Apthorp Gould Prize* at NAS annual meeting—Apr, 3
 Woodson, Herbert H., of University of Texas, Austin, elected to National Academy of Engineering—Apr, 8
 World Data Centers: *see An Assessment of the Impact of World Data Centers on Geophysics*
 World Food, Health and Population, NRC Committee on: *see Population and Food: Crucial Issues*

Yallow, Rosalyn S., of Mount Sinai School of Medicine, City University of New York, and Veterans Administration Hospital, Bronx, elected to National Academy of Sciences—Apr, 3

